DIME Dynamic Documentation Training
Stata Exercise

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Introduction

This exercise introduces you to how to export files from Stata that can be read in LaTeX. See exercise 1 and 2 for instructions on how to import file into LaTeX. After this exercise and exercise 1, you will have a document that is automatically updated each time you run your Stata and your LaTeX code.

We have provided you with a do-file that has code that creates file that you can import in a LaTeX document. We will go through these examples and then we will ask you to create some tables and graphs of your own using your own data. Note that this is not an exercise on Stata, only on exporting in LaTeX format from Stata, so this exercise assumes knowledge of some intermediate level Stata commands.

Part 1: Setting up a Folder Structure

Do not rush over this part. You will be forced to write an necessarily complicated LaTeX code unless you set up a simple but well organized folder structure for where to export tables and figures from Stata. We strongly recommend that you start by setting up the following folder structure.

Create one folder called `Output`, and inside this folder, create a folder called `Raw`. In the `Raw` folder you will export tables and graphs from Stata that you will import in your LaTeX document. Your LaTeX document will be saved in the `Output` folder.

See the example below. As your project grows bigger it is common that sub-folders are added in the `Raw` folder. For example, tables and figures often have separate folders. You will find your preferred way to organize this.

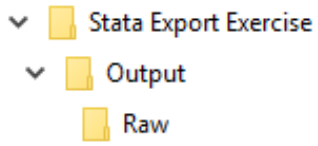

Figure 1: Common Folder Structure

Part 2: Setting your path for Stata

We now need to tell all commands in Stata to save the tables and figures they export to the `Raw` folder. We want to create a global with the file path pointing to the `Raw` folder that we can use in our commands. Using a global instead of typing out the folder location in all commands both makes the code simpler, and makes it easier to update if you would have to move your folders.

Open the do-file `Export tables and images.do` that you find in the same folder as this handout. Look for the part that says:

```
global main_folder "<<<ENTER YOUR FOLDER PATH HERE>>>"
```

You need to enter the path to the folder you created in part 1. If you have a Windows computer and you created your `Output` folder in your Documents folder, then your file path should look similar to this:

```
global main_folder "C:\Users\JoeSmith\Documents"
```

The following two sub-sections help you find the file path to the folder you just created if you are not sure how to do that. The first sub-section gives advice for Windows, and the second for Mac.

Finding Path on a Windows Computer

Path to a file can be found by selecting a file and pressing SHIFT on your keyboard and RIGHT CLICKING your mouse and then clicking COPY AS PATH in the resulting drop down menu as shown in Figure 2.

Figure 2: Finding path on a Windows Computer - Solution 1

Another solution to finding the path on a Windows computer is shown in Annex 1.

Finding Path on a Mac

Important notes on file formats

Not all file formats that you can chose when exporting from Stata is valid to import into LaTeX. Figures must be saved in `.png` format. All figures produced in Stata can be exported in `.png`. Even if some commands are not able to export in this format, Stata can convert it for you. More about that below.

Tables must be saved in `.tex` format. Tables cannot be converted as easily as figures, so it is usually easier to find an alternative command that produces the same table but can export to `.tex` format. Most commands that export tables are able to export to this format so it should not be difficult to find an alternative.

The files will exported in for example `MS Word` or `MS Excel` formats are not valid to import to LaTeX.

Files exported from Stata should have descriptive name. Otherwise you increase the risk for human errors, and the whole point of dynamic documents is to reduce exactly that. For example - rather than `graph1.png`, `graph2.tex`, names like `treatmentEffectGraph.png` would make it easier to understand what files we are using.

Part 3, Task 1: Tabulate Categorical Variables

While exporting summary statistics table using `esttab, using "$output/categorical.tex", replace` should always include an explanatory file name and also the LaTeX extension `.tex`.

Part 3, Task 2: Regression table

Similar to Part 1, Task 1, while using `esttab` to export regression tables, the `using "$output/regression_table.tex"` part should include an explanatory file name(in this case `regression_table.tex`) and should also have the LaTeX file extension `.tex`.

Part 4, Task 1: Manually Create a Graph and then Export it

This task shows us how to export graphs created in Stata to export in a format that LaTeX can read. Using the `graph export "$output/regular_graph.png", width(5000) replace` exports the graph in png format which LaTeX can read.

Part 4, Task 2: Using `iegraph` to create a figure

This exercise teaches how to use `iegraph` to create a figure and export it to the graphs folder.

Using the `save("$output/iegraph.png")` ensures that the graphs are directly saved to the specified output folder.

Part 5: Using a do-file to edit a .tex file after exporting it

During this part of the exercise, you will learn how to use commands in Stata to format your tables. While tables exported from Stata to LaTeX are generally very nice, sometimes they need to be tweaked a little to make them look nicer. So, in this exercise, you'll use the `filefilter` command in Stata to make small changes to the files exported by Stata.

Annex 1

Figure 3: Finding Path on a Windows Computer

As shown in Figure 3, left clicking(normal click) on the bar at the top of the `File Explorer` windows where our files are saved shows us the complete path to the files in a Windows computer.

Figure 4: Path shown on a Windows Computer

We can see in Figure 4, that the complete path to the folder is shown. We can then paste this path when setting the path in our Stata do-file and changing the path where it says

```
global main_folder ‘‘<<<ENTER YOUR FOLDER PATH HERE>>>’’
```